Notice of Allowability	Application No.	Applicant(s)	
	10/718,515	YAMAMOTO, KENJI	
	Examiner	Art Unit	
	Sun J. Lin	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendments & Remarks filed on 03/03/2006*.

2. ☒ The allowed claim(s) is/are *4-9,11-15 and 17-19, renumbered (37 CFR 1.126)*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Applicant's attorney David A. Blumenthal gave authorization for this examiner's amendment on May 16, 2006. The application has been amended based on Amendment filed on 03/03/2006 to correct some informalities as listed follows:

Claim 11, line 11, change "formed as" to —**formed of**—.
Claim 11, line 13 – 14, change "formed as" to —**formed of**—.
Claim 11, line 15, change "formed as" to —**formed of**—.
Claim 13, line 4, change "formed as" to —**formed of**—.
Claim 13, line 5, change "formed as" to —**formed of**—.
Claim 14, line 4, change "formed as" to —**formed of**—.
Claim 14, line 6, change "formed as" to —**formed of**—.
Claim 14, line 10, change "formed as" to —**formed of**—.
Claim 14, line 12, change "formed as" to —**formed of**—.
Claim 14, line 14, delete —**and**—.
Claim 14, line 11, change "formed as" to —**formed of**—.
Claim 14, line 15, change "formed as" to —**formed of**—.
Claim 14, line 15, delete —**each of**—.
Claim 14, line 16, change "second via" to —**third via**—.
Claim 14, line 16 – 17, change "second wiring;" to —**third wiring; and**—.
Claim 14, line 18 – 19, change "said fourth via being ...with said third via." to —

Wherein:

said fourth via being supplied with one of a power potential and a third clock signal and being free from connection with said second via; and

said upper-level wiring layer is formed as a customized wiring layer such that a pattern of said upper-layer wiring layer is determined based on customer specifications, and said lower-level wiring layer being formed as a fixed wiring layer such that a pattern of said lower-layer wiring is determined independently of the customer specifications.—.

Claim 15, line 1, change "third via" to —**fourth via**—.

Claim 15, line 2, change "to supply said second clock to said circuit" to **—to be supplied with said third clock signal—**.

Claim 16 is cancelled.

Claim 18, line 4, change "formed as" to **—formed of—**.
Claim 18, line 6, change "formed as" to **—formed of—**.
Claim 19, line 2, change "formed as" to **—formed of—**.

Reasons for Allowance

Claims 4 – 9, 11 – 15 and 17 – 19 are allowed over the prior art of record. An examiner's statement of reasons for allowance is given in the following:

Claims 4 – 9, 11 – 15 and 17 – 19 are allowed because the prior art doest not teach or fairly suggest the following subject matter:

- A master slice semiconductor integrated circuit *comprising at least two wiring layers for wiring and a plurality of clock buffer connected by clock wirings in a form of clock tree, wherein each of said clock wirings among said plurality of clock buffers comprises a wiring layer switching portion which switches a clock wiring from a lower wiring layer of said at least two wiring layers to an upper wiring layer of said at least two wiring layers wherein said upper wiring layer is a wiring layer for customized wirings, and said lower wiring layer is a wiring layer for fixed wirings* in combination with other limitations recited in independent **Claim 4**;
- A semiconductor device *comprising a first wiring layer above a semiconductor substrate, said first wiring layer being formed as a customized wiring layer such that a pattern of said first wiring layer is determined based on custom specifications* and *a second wiring layer between the semiconductor substrate and said first wiring layer, said second wiring layer being formed as a fixed wiring layer such that a pattern of said second wiring layer is determined independently of the customer specifications* in combination with other limitations recited in independent **Claim 11**;
- A semiconductor device having a multilevel wiring structure including a lower-level wiring layer, an upper-level wiring layer and an insulating film intervening between said lower-level and upper-level wiring layer, *said upper-level wiring layer is formed as a customized wiring layer such that a pattern of said upper-layer wiring layer is determined based on customer specifications, and said*

lower-level wiring layer being formed as a fixed wiring layer such that a pattern of said lower-layer wiring is determined independently of the customer specifications in combination with other limitations recited in independent **Claim 14**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sun J. Lin whose telephone number is (571) 272 - 1899. The examiner can normally be reached on Monday to Friday from 9:00am to 6:00pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Sun J. Lin
Patent Examiner
Art Unit 2825
May 17, 2006

SUN JAMES LIN
PRIMARY EXAMINER